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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,026	01/12/2005	Ake Rydgren	9564-28	6556
20792	7590	09/19/2008		
MYERS BIGEL, SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			EXAMINER SHARMA, SUJATHA R	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 09/19/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/521,026

**Applicant(s)**

RYDGREN, AKE

**Examiner**

SUJATHA SHARMA

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 July 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 16-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13, 16-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added claimed feature recites “multipath connector directly connected to the data processing means”.

The above underlined claimed feature is not disclosed in the specification and hence is considered as new matter.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] in view of Winstead [US 6,424,842].

Regarding claim 1, Hitoshi discloses a portable telephone (10 in Fig. 6-11) and additional device for the same (20,30 in Figs. 6-11). He further discloses a portable telephone comprising data processing means for controlling terminal functions (col. 6, line 1 – col. 7, line 2), and attaching means for releasable attachment of a housing to the terminal (col. 1, line 65 – col. 2, line 30; col. 4, lines 17-22, and a multipath connector connected to the data processing means (col. 4, lines 28-32, figs. 15a, 15b, 15c), wherein said the multipath connector includes a terminal system connector ( 55 in Fig. 15c), and a housing connector ( 51 and 53 in Figs. 15a,15b) configured to provide a communicative connection of an attached housing to the data processing means (col. 6, lines 11-37)

However, he does not disclose a method where the multipath connector is directly connected to the data processing means.

Winstead, in the same field of endeavor, teaches a method where the multipath connector is directly connected to the data processing means. See Figs. 3-8 and col. 3, line 1 – col. 4, line 30. Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Winstead to Hitoshi to have both he housing connector and the system connector on a single unit that is directly connected to the data processing means in order to eliminate redundant components and making the phones increasingly smaller and thus also resulting in cost savings.

Regarding claim 2, Hitoshi discloses a portable telephone wherein the multipath connector is positioned such that the system connector is accessible from an outer portion of the terminal (see

fig. 15c where the system connector is at the bottom and easily accessible from the outside of the terminal for connecting to external equipment such as a modem connection), and such that said the housing connector faces a front or rear side of the terminal (connector 31 in Figs. 6,7 and connector 53 in Figs. 15a,15b where it is in the rear of the terminal for easy attachment of the additional device 30)

Regarding claim 3, Hitoshi discloses a portable telephone wherein the multipath connector is positioned such that the system connector is accessible from the outside outer portion of the terminal, and such that said the housing connector faces a different direction than the system connector. See figs 15a-15c, col. 6, lines 11-49

Regarding claim 4, Hitoshi discloses a portable telephone wherein the multipath connector is positioned at an end of the terminal, such that the system connector is accessible in a longitudinal direction of the terminal, and where said the housing connector faces a front or rear side of the terminal. See Fig. 14, Figs 15a-15c, col. 6, lines 11-49

Regarding claim 5, Hitoshi discloses a portable telephone wherein the multipath connector comprises two housing connectors, configured to provide a communicative connection of a front housing and a rear housing. See figs 15a – 15c where 51 connects to the front/main housing and 53 connects to the rear housing.

Regarding claim 6, Hitoshi discloses a portable telephone wherein the multipath connector comprises connector poles that are branched to said the system connector and the housing connector. See Figs. 15a-15c and col. 6, lines 1-49

5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] and Winstead [US 6,424,842] in view of John [WO 02 41607]

Regarding claim 7, Hitoshi as treated in claim 1 discloses all the limitations as claimed. However, he does not disclose a disconnectable housing for a radio communication terminal having data processing means for controlling terminal functions, the housing comprising attaching means for releasable attachment of the housing to the terminal and a terminal connector configured to provide bus connectivity with said the terminal upon attachment, and functional means connected to the terminal connector for affecting the function of the attached terminal. John, in the same field of endeavor, teaches a disconnectable housing for a radio communication terminal having data processing means for controlling terminal functions, the housing comprising attaching means for releasable attachment of the housing to the terminal (see page 1, line 29- page 3, line 5) and a terminal connector (28 in Fig. 2) configured to provide bus connectivity with said the terminal upon attachment, and functional means connected to the terminal connector for affecting the function of the attached terminal (page 6, lines 8-11). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of John to modified Hitoshi to provide different housing designs and enhance user experience.

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Regarding claim 8, John discloses disconnectable housing wherein the functional means for affecting the function of an attached terminal comprises a micro controller. See page 6, lines 19-25 and page 7, lines 7-10

Regarding claim 9, John discloses disconnectable housing wherein the functional means for affecting the function of an attached terminal comprises a functional member configured to add a feature to the terminal when the housing is attached thereto. See page 2, lines 19-30

Regarding claim 10, John discloses disconnectable housing wherein the functional means for affecting the function of an attached terminal comprises a functional member, configured to modify a feature of the terminal when the housing is attached thereto. See page 2, lines 19-30

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] and Winstead [US 6,424,842] in view of White[GB 2 339 342].

Regarding claim 16, Hitoshi as treated in claim 1 discloses all the limitations as claimed.

However, he does not disclose a connector joining a battery and 2 PCBs in a mobile phone.

White further discloses a multipath connector for a radio communication terminal, wherein the multipath connector has separate first and second connector interfaces comprising interconnected poles.

White, in the same field of endeavor, teaches a connector joining a battery and 2 PCBs in a mobile phone. White further discloses a multipath connector for a radio communication terminal,

wherein the multipath connector has separate first and second connector interfaces comprising interconnected poles. See page 5, lines 10-22; page 7, lines 1-7 and Figs. 2-4,8

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of White to modified Hitoshi to provide different housing designs and enhance user experience.

Regarding claim 17, White discloses a connector further comprising connection pads for connection to a terminal PCB. See page 5, lines 10-22; page 7, lines 1-7 and Figs. 2-4,8

Regarding claim 18, White discloses a connector wherein the connector is configured to be fixed to an end of a terminal PCB, such that one-the first connector interface faces outwardly in the longitudinal direction of said the PCB, and the second connector interface faces outwardly substantially perpendicular to the PCB. See page 5, lines 10-22; page 7, lines 1-7 and Figs. 2-4,8

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] and Winstead [US 6,424,842] in view of John [WO 02 41607] and further in view of Guy [WO 01 37229]



Regarding claim 11, Hitoshi as modified by Winstead and John discloses all the limitations as claimed. However, he does not disclose a method wherein the functional member comprises a touch-sensitive display.

Guy, in the same field of endeavor, teaches a modular communication system wherein atleast one module interfaces with the base unit and comprises a touch-sensitive display. See page 16, line 15 – page 17, line 8.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above functionality of touch-sensitive screen taught by Guy to modified Hitoshi in order to enhance the functionality of the portable telephone.

Regarding claim 13, Guy further discloses a method wherein the functional member comprises a digital image recorder. See page 19, line 26 – page 20, line 17

3. Claims 11,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] and Winstead [US 6,424,842] in view of John [WO 02 41607] and further in view of David [US 5,655,017]

Regarding claim 12, Hitoshi as treated in claim 9 discloses a all the limitations a s claimed.

However, he does not disclose a method wherein the functional member comprises a speaker for hands free operation.

David, in the same field of endeavor, teaches a method wherein the functional member comprises a speaker for hands free operation.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above functionality of having a speaker as taught by David to modified Hitoshi in order to enhance the functionality of the portable telephone.

4. Claims 11,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi [EP 608899] and Winstead [US 6,424,842] in view of John [WO 02 41607] and further in view of Noriyuki [EP 518 578]

Regarding claim 19, Hitoshi as treated in claim 18 discloses all the limitations as claimed. However, he does not disclose a method further comprising a third connector interface facing outwardly substantially perpendicular to the PCB in the a direction that is opposite from said the second connector interface.

Noriyuki, in the same field of endeavor, teaches a method further comprising a third connector interface facing outwardly substantially perpendicular to the PCB in the a direction that is opposite from said the second connector interface. See col. 2, lines 1-13, col. 4, lines 3-16 and Figs. 1-3.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Noriyuki to modified Hitoshi in order to provide proper contact from each electric contact to a terminal portion which is to be electrically conducted to a printed circuit board in order to cope effectively with high frequency signals.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUJATHA SHARMA whose telephone number is (571)272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S./  
Primary Examiner, Art Unit 2618  
Sujatha Sharma  
September 12, 2008